

33199101.APP  
SEQUENCE LISTING



<110> THE UNIVERSITY OF TEXAS  
PAUL, SUDHIR

<120> LUPUS ANTIBODIES FOR PASSIVE IMMUNOTHERAPY OF HIV/AIDS

<130> 330199.00101

<140> PCT/US2004/009662

<141> 2004-03-29

<150> 60/457,570

<151> 2003-03-27

<160> 66

<170> PatentIn Ver. 3.3

<210> 1

<211> 48

<212> DNA

<213> Human immunodeficiency virus type 1

<400> 1

aaacaaatta taaacatgtg gcaggaagta ggaaaagcaa tgtatgcc 48

<210> 2

<211> 48

<212> DNA

<213> Human immunodeficiency virus type 1

<400> 2

ggcatacatt gcttttccta cttcctgcca catgtttata atttgttt 48

<210> 3

<211> 48

<212> DNA

<213> Human immunodeficiency virus type 1

<400> 3

aaacaaatta taaacatgtg gcaggaagta ggaaaagcaa tgtatgcc 48

<210> 4

<211> 48

<212> DNA

<213> Human immunodeficiency virus type 1

<400> 4

ggcatacatt gcttttccta cttcctgcca catgtttata atttgttt 48

<210> 5

<211> 16

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 5

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala  
1 5 10 15

<210> 6  
 <211> 16  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Linker peptide

<400> 6  
 Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Ser Ala  
 1 5 10 15

<210> 7  
 <211> 56  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 7  
 gtcctcgcaa ctgcggccca gccggccatg gccgacatcc agatgaccca gtctcc 56

<210> 8  
 <211> 56  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 8  
 gtcctcgcaa ctgcggccca gccggccatg gccgatgttg tgatgactca gtctcc 56

<210> 9  
 <211> 56  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 9  
 gtcctcgcaa ctgcggccca gccggccatg gccgaaattg tgttgacgca gtctcc 56

<210> 10  
 <211> 56  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 10  
 gtcctcgcaa ctgcggccca gccggccatg gccgacatcg tgatgaccca gtctcc 56

<210> 11  
<211> 56  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 11  
gtcctcgcaa ctgcggccca gccggccatg gccgaaacga cactcacgca gtctcc 56

<210> 12  
<211> 56  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 12  
gtcctcgcaa ctgcggccca gccggccatg gccgaaattg tgctgactca gtctcc 56

<210> 13  
<211> 39  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 13  
ccatcctgcg gccgcacact ctcccctggt gaagctctt 39

<210> 14  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 14  
gcctgaaccg cctccaccac tcgagcggtt gatctccacc ttggtccc 48

<210> 15  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 15  
gcctgaaccg cctccaccac tcgagcggtt gatctccagc ttggtccc 48

<210> 16  
<211> 48  
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 16

gcctgaaccg cctccaccac tcgagcgttt gatatccact ttggtccc 48

<210> 17

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 17

gcctgaaccg cctccaccac tcgagcgttt gatctccacc ttggtccc 48

<210> 18

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 18

gcctgaaccg cctccaccac tcgagcgttt aatctccagt cgtgtccc 48

<210> 19

<211> 56

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 19

gtcctcgcaa ctgcggccca gccggccatg gccagctctg tgttgacgca gccgcc 56

<210> 20

<211> 56

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

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gtcctcgcaa ctgcggccca gccggccatg gccagctctg ccctgactca gcctgc 56

<210> 21

<211> 56

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 21  
gtcctcgcaa ctgcggccca gccggccatg gcctcctatg tgctgactca gccacc 56

<210> 22  
<211> 56  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 22  
gtcctcgcaa ctgcggccca gccggccatg gcctcttctg agctgactca ggaccc 56

<210> 23  
<211> 56  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 23  
gtcctcgcaa ctgcggccca gccggccatg gcccacgtta tactgactca accgcc 56

<210> 24  
<211> 56  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 24  
gtcctcgcaa ctgcggccca gccggccatg gcccaggctg tgctcactca gccgtc 56

<210> 25  
<211> 56  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 25  
gtcctcgcaa ctgcggccca gccggccatg gccaatttta tgctgactca gcccca 56

<210> 26  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 26

gcctgaaccg cctccaccac tcgagcctag gacggtgacc ttggtccc 48

<210> 27  
 <211> 48  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 27  
 gcctgaaccg cctccaccac tcgagcctag gacggtcagc ttggtccc 48

<210> 28  
 <211> 48  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 28  
 gcctgaaccg cctccaccac tcgagcctaa aacggtgagc tgggtccc 48

<210> 29  
 <211> 27  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 29  
 tgaagattct gtaggggcca ctgtctt 27

<210> 30  
 <211> 41  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 30  
 catgaccaca gtgcacttca ggtgcagctg gtgcagtctg g 41

<210> 31  
 <211> 41  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Primer

<400> 31  
 catgaccaca gtgcacttca ggtcaactta agggagtctg g 41

<210> 32  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 32  
catgaccaca gtgcacttga ggtgcagctg gtggagtctg g 41

<210> 33  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 33  
catgaccaca gtgcacttca ggtgcagctg caggagtcgg g 41

<210> 34  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 34  
catgaccaca gtgcacttca ggtgcagctg ttgcagtctg c 41

<210> 35  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 35  
catgaccaca gtgcacttca ggtacagctg cagcagtcag g 41

<210> 36  
<211> 42  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 36  
gagtcattct gcggccgcgg ggaagacsga tgggcccttg gt 42

<210> 37  
<211> 42  
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 37

gagtcattct gcggccgcgg ggaaaagggt tggggcggat gc

42

<210> 38

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 38

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala  
1 5 10 15

<210> 39

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 39

caaattataa acatgtggca ggaagtagga aaa

33

<210> 40

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 40

caaattaaaa actttttaaa gaaagtagga aaa

33

<210> 41

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 41

Gln Ile Lys Asn Phe Leu Lys Glu Val Gly Lys Val Val Tyr Ile  
1 5 10 15

<210> 42

<211> 8



<212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 42  
 Lys Gly Gly Lys Ala Thr Tyr Ser  
   1                  5

<210> 43  
 <211> 107  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Light chain SK18 VL domain

<400> 43  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
   1                  5                  10                  15  
 Asp Arg Val Thr Val Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr  
                   20                  25                  30  
 Leu Asn Trp Tyr Gln Gln Gln Pro Gly Lys Ala Pro Lys Leu Leu Ile  
           35                  40                  45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
   50                  55                  60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
   65                  70                  75                  80  
 Glu Asp Phe Ala Thr Tyr Phe Cys Gln Gln Ser Tyr Ser Ile Pro Arg  
                   85                  90                  95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys  
           100                  105

<210> 44  
 <211> 111  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: scFv JL427 VL domain

<400> 44  
 Gln Ser Val Leu Thr Gln Pro Pro Ser Val Ser Gly Ala Pro Gly Gln  
   1                  5                  10                  15  
 Arg Val Thr Ile Ser Cys Ser Gly Ser Ser Ser Asn Phe Gly Leu Asn  
           20                  25                  30  
 Tyr Val Thr Trp Gln Gly His Phe Pro Gly Thr Ala Pro Lys Leu Leu  
   35                  40                  45  
 Ile Tyr Arg Asn Asp Gln Arg Pro Leu Gly Val Pro Ala Arg Phe Ser  
   50                  55                  60

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Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu Arg  
 65 70 75 80  
 Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Asn Ser Leu  
 85 90 95  
 Ser Gly Trp Val Phe Gly Gly Gly Tyr Gln Leu Tyr Val Leu Gly  
 100 105 110

<210> 45  
 <211> 118  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: scFv JL427 VH domain

<400> 45  
 Gln Val Gln Leu Gln Gln Ser Gly Gly Gly Leu Val Gln Pro Gly Arg  
 1 5 10 15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
 20 25 30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
 35 40 45  
 Ser Tyr Ile Gly Arg Ser Gly Ser His Thr Asn Tyr Ala Asp Ser Val  
 50 55 60  
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
 65 70 75 80  
 Leu Gln Ile Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Arg Gly Leu Pro Asn Tyr Gly Met Asp Ile Trp Gly Gln Gly Thr  
 100 105 110  
 Thr Val Thr Val Ser Ser  
 115

<210> 46  
 <211> 106  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: scFv JL413 VL domain

<400> 46  
 Asp Val Val Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Gly Asn Trp  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala His Asn Leu Leu Ile  
 35 40 45

Tyr Gly Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Ser Ala Thr Tyr Tyr Cys Gln Gln Ala Leu Val Gly Thr Phe  
 85 90 95  
 Gly Gly Gly Thr Lys Val Glu Ile Lys Ala  
 100 105

<210> 47  
 <211> 107  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: scFv JL413 VH domain

<400> 47  
 Gln Val Asn Leu Arg Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Gly Phe Ile Ser Ser Tyr  
 20 25 30  
 Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp Ile  
 35 40 45  
 Gly Phe Thr Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu Lys  
 50 55 60  
 Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser Leu  
 65 70 75 80  
 Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Met Tyr Cys Tyr Cys  
 85 90 95  
 Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser  
 100 105

<210> 48  
 <211> 15  
 <212> PRT  
 <213> Human immunodeficiency virus type 1

<400> 48  
 Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr  
 1 5 10 15

<210> 49  
 <211> 15  
 <212> PRT  
 <213> Human immunodeficiency virus type 1

<400> 49  
 Lys Gln Ile Ile Asn Met Trp Gln Arg Ala Gly Gln Ala Ile Tyr  
 1 5 10 15

<210> 50  
 <211> 15  
 <212> PRT  
 <213> Human immunodeficiency virus type 1

<400> 50  
 Arg Gln Ile Ile Asn Leu Trp Gln Arg Thr Gly Gln Ala Ile Tyr  
     1                    5                    10                    15

<210> 51  
 <211> 15  
 <212> PRT  
 <213> Human immunodeficiency virus type 1

<400> 51  
 Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr  
     1                    5                    10                    15

<210> 52  
 <211> 15  
 <212> PRT  
 <213> Human immunodeficiency virus type 1

<400> 52  
 Lys Gln Ile Val Asn Leu Trp Gln Glu Val Gly Lys Ala Met Tyr  
     1                    5                    10                    15

<210> 53  
 <211> 15  
 <212> PRT  
 <213> Human immunodeficiency virus type 1

<400> 53  
 Lys Gln Ile Ile Asn Met Trp Gln Gly Val Gly Arg Ala Met Tyr  
     1                    5                    10                    15

<210> 54  
 <211> 15  
 <212> PRT  
 <213> Human immunodeficiency virus type 1

<400> 54  
 Lys Gln Ile Val Asn Met Trp Gln Gly Val Gly Arg Ala Thr Tyr  
     1                    5                    10                    15

<210> 55  
 <211> 15  
 <212> PRT  
 <213> Human immunodeficiency virus type 1

<400> 55  
 Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr  
     1                    5                    10                    15

<210> 56  
 <211> 15

&lt;212&gt; PRT

&lt;213&gt; Human immunodeficiency virus type 1

&lt;400&gt; 56

Lys	Gln	Ile	Ile	Asn	Met	Trp	Gln	Gly	Val	Gly	Lys	Ala	Met	Tyr
1				5				10						15

&lt;210&gt; 57

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Human immunodeficiency virus type 1

&lt;400&gt; 57

Arg	Gln	Ile	Val	Asn	Met	Trp	Gln	Glu	Val	Gly	Arg	Ala	Met	Tyr
1				5				10						15

&lt;210&gt; 58

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Human immunodeficiency virus type 1

&lt;400&gt; 58

Lys	Gln	Ile	Val	Asn	Met	Trp	Gln	Gly	Val	Gly	Arg	Ala	Met	Tyr
1				5				10						15

&lt;210&gt; 59

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Human immunodeficiency virus type 1

&lt;400&gt; 59

Lys	Gln	Ile	Val	Arg	Met	Trp	Gln	Arg	Val	Gly	Gln	Ala	Met	Tyr
1				5				10						15

&lt;210&gt; 60

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Human immunodeficiency virus type 1

&lt;400&gt; 60

Lys	Gln	Ile	Val	Asn	Met	Trp	Gln	Arg	Val	Gly	Gln	Ala	Met	Tyr
1				5				10						15

&lt;210&gt; 61

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Human immunodeficiency virus type 1

&lt;400&gt; 61

Lys	Gln	Ile	Val	Arg	Met	Trp	Gln	Arg	Thr	Gly	Gln	Ala	Ile	Tyr
1				5				10						15

&lt;210&gt; 62

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Human immunodeficiency virus type 1

&lt;400&gt; 62

Lys Gln Ile Ile Asn Met Trp Gln Lys Val Gly Gln Ala Ile Tyr  
 1 5 10 15

&lt;210&gt; 63

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Human immunodeficiency virus type 1

&lt;400&gt; 63

Arg Gln Ile Val Asn Leu Trp Thr Arg Val Gly Lys Gly Ile Tyr  
 1 5 10 15

&lt;210&gt; 64

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Human immunodeficiency virus type 1

&lt;400&gt; 64

Arg Gln Val Val Arg Ser Trp Ile Arg Gly Gln Ser Gly Leu Tyr  
 1 5 10 15

&lt;210&gt; 65

&lt;211&gt; 33

&lt;212&gt; DNA

&lt;213&gt; Human immunodeficiency virus type 1

&lt;400&gt; 65

caaattataa acatgtggca gaaagtagga aaa

33

&lt;210&gt; 66

&lt;211&gt; 33

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: synthetic rv\_85283 polynucleotide sequence

&lt;400&gt; 66

caaattaaaa actttttaaa gaaagtagga aaa

33